ALABAMA ENGINEERING JOB APPROVAL AUTHORITY

NAME______TITLE_____GRADE___LOCATION____

| DELEGATED BY | ED BYTITLE(Responsible Engineer) | | | |
|---|--|---|--|--|
| · | Responsible Engineer) | | | |
| CONCURRED BY | (Supervisor) | TITLE | DATE | |
| This form will be reviewed table will be used to indica | I with the employee annuall ate that the review has been | y and revised as needed. If no significar n made by the appropriate engineering po | it changes are made, the following ersonnel. | |
| | | | | |
| REVIEWED BY | TITLE | COMMENTS | DATE | |
| REVIEWED BY | TITLE | COMMENTS | DATE | |

| PRACTICE | PRAC. | | | | | MAX APPROVAL AUTHORITY | | | | | | |
|--------------|-------|--|-------|------|------|---------------------------|------|------|------------------|-----|----------|-----|
| NAME | CODE | FACTOR | UNITS | 1 | II | III | IV | V | VI | I&E | AUTHORIT | СЅТ |
| Any Practice | | Hazard potential as defined by Sec. 503 of NEM | Class | Low | Low | Low | Low | Low | Signifi- cant | ı | I | ı |
| Any Practice | | Alter the visual resources of beaches and shorelines on oceans | | None | None | None | None | None | All | ı | ı | ı |

DAMS AND STRUCTURES 1/

| PRACTICE | PRAC. | CONTROLLING | | | | JOE | CLASSES | | | l l | APPRO UTHORI | |
|--|-------------------------------------|---|------------|-----------|---------|---------|----------|------------|------------|-----|-----------------|-----|
| NAME | CODE | FACTOR | UNITS | ı | II | III | IV | V | VI | I&E | DSN | CST |
| Commercial Fishponds | 397 ^{2/} 402 ^{2/} | Box Culvert, Ar. Open | sq.ft. | None | 4 | 8 | 12 | All | All | | | |
| Dam Grade | 410 ^{2/} | Conduit (barrel) | in. | 12 | 24 | 30 | 36 | All | All | | | |
| Stabilization Structure | 552 ^{2/} | Conduit (siphon) | ln. | 4 | 8 | 12 | 16 | All | All | | | |
| Irrigation Pit or Regulating | 436 ^{2/} | Drainage Area | ac. | 160 | 320 | 640 | 1320 | 12,800 | 25,600 | | | |
| Reservoir Irrigation | 378 ^{2/} | Effective Height | ft. | 15 | 20 | 25 | 30 | 35 | 50 | | | |
| Storage Reservoir | 350 ^{2/} 587 ^{2/} | Embankment over active fault | | None | None | None | None | None | None | | | |
| Pond Sediment Basin | 307 | Open Channel Spillway Flow | cfs. | 150 | 300 | 1000 | 2000 | All | All | | | |
| Structure for Water Control | | Pipe Conduit Capacity | cfs. | 25 | 75 | 125 | 200 | All | All | | | |
| | | Storage x Effective Height | ac.ft.xft. | 500 | 1000 | 2000 | 3000 | All | All | | | |
| Fish Raceways or Tank | 398 | Concrete, Block, or Tank Surface Area | ac. | None | 0.1 | 0.2 | 0.5 | All | All | | | |
| | | Earthen, Surface Area | ac. | None | 0.1 | 0.5 | 2.0 | All | All | | | |
| Pond Sealing or Lining - Flexible Membrane | 521A | Perm. Pool Depth Area | ft. ac. | 10 1/2 | 15 1 | 20 2 | 25 5 | All All | All All | | | |
| Pond Sealing or Lining - Soil Dispersant | 521B | Perm. Pool Depth Area | ft. ac. | 10 2 | 15 4 | 20 8 | 25 10 | All All | All All | | | |
| Pond Sealing or Lining - Bentonite | 521C | Perm. Pool Depth Area | ft. ac. | 10 2 | 15 4 | 20 8 | 25 10 | AII AII | AII AII | | | |

WASTE MANAGEMENT SYSTEMS

| PRACTICE | PRAC. | CONTROLLING | | | | JOE | B CLASSES | | | | APPROUTHORI | |
|----------------------------------|-------|---|----------------|--------------|------------|------------|-------------|------------|------------|-----|-------------|-----|
| NAME | CODE | FACTOR | UNITS | I | II | III | IV | V | VI | I&E | DSN | CST |
| Animal Trails and Walkways | 575 | Surface Treatment | Kind | Earth | Earth | Earth | Gravel | All | All | | | |
| | | Length | ft. | 500 | 1000 | 2000 | 5000 | All | All | | | |
| Composting Facility | 317 | Animal Units 3/ | no. | 100 | 250 | 500 | 1000 | All | All | | | |
| Constructed Wetland | 656 | Animal Units 3/ Area | no. ac. | None None | 60 0.3 | 120 0.5 | 600 1.0 | AII AII | AII AII | | | |
| Incinerator | 769 | 1000 Birds No. Sows | no. | 60 100 | 120 200 | 250 500 | 500 1000 | AII AII | AII AII | | | |
| Manure Transfer | 634 | Animal Units 3/ | no. | None | 120 | 300 | 600 | All | All | | | |
| Closure of Waste Impoundments | 360 | Surface Area | ac. | None | 1 | 2 | 5 | All | All | | | |
| Waste Field Storage | 749 | Animal Units 3/ | no. | None | All | All | All | All | All | | | |
| Waste Storage Facility | 313 | Storage Capacity | 1000 cu.ft. | 100 | 200 | 500 | 1000 | 2000 | 5000 | | | |
| | | Effective Height of Dam | ft. | 15 | 20 | 25 | 30 | All | All | | | |
| | | Liquid or Slurry Design Cap., Animal Units 3/ | no. | None | 50 | 250 | 500 | All | All | | | |
| | | Wall Height Above Ground Below Ground | ft. ft. | None None | 6 6 | 8 8 | 12 8 | All All | AII AII | | | |
| | | Tank Span Above Ground Below Ground | ft. ft. | None None | 8 6 | 12 10 | 24 12 | All All | AII AII | | | |
| | | Tank, Silo Type (Preapproved) | no. | None | None | All | All | All | All | | | |
| | | Dry Stack Animal Units 3/ | no. | None | 250 | 500 | 1000 | All | All | | | |
| Waste Treatment Lagoon | 359 | Aerobic Surface Area | ac. | None | 2 | 5 | 10 | 25 | 50 | | | |
| | | Anearobic Volume | 1000 cu.ft. | None | 200 | 500 | 1000 | 2000 | 5000 | | | |
| | | Effective Height of Dam | ft. | 15 | 20 | 25 | 30 | All | All | | | |

WATER MANAGEMENT SYSTEMS

| PRACTICE | PRAC. | CONTROLLING | | | | JOB CL | ASSES | | | MAX APPROVAL AUTHORITY | | | |
|--|-------|--------------------------------|-----------------|----------|----------|----------|----------|------------|------------|---------------------------|-----|-----|--|
| NAME | CODE | FACTOR | UNITS | I | II | III | IV | v | VI | I&E | DSN | CST | |
| Agricultural Fuel Containment Facility | 701 | Fuel | gal. | 100 | 300 | 660 | 1320 | All | All | | | | |
| Agrichemical Handling Facility | 702 | Secondary Containment | gal. | None | None | 500 | 1000 | All | All | | | | |
| Transming Facility | | Eave Height | ft. | None | 10 | 14 | All | All | All | | | | |
| Anionic Polyacrylamide (PAM) Erosion Control | 450 | Area Treated | ac. | 1 | 2 | 5 | All | All | All | | | | |
| Bedding | 310 | System Operating as Unit | ac. | 20 | 40 | All | All | All | All | | | | |
| Diversion | 362 | Capacity | cfs | 100 | 150 | 200 | 250 | All | All | | | | |
| Filter Strip | 393 | Area Protected | ac. | All | All | All | All | All | All | | | | |
| Grassed Waterway | 412 | Capacity | cfs | 100 | 150 | 200 | 250 | All | All | | | | |
| Lined Waterway or Outlet | 468 | Design Capacity | cfs | None | 50 | 100 | 200 | All | All | | | | |
| Portable Agrichemical Mixing Station | 703 | Secondary Containment | gal. | None | 10 | 25 | 50 | All | All | | | | |
| Roof Runoff Structure | 558 | Capacity | cfs | 10 | 20 | 50 | 100 | All | All | | | | |
| Row Arrangement | 557 | Area of Field | ac | 40 | 160 | 320 | All | All | All | | | | |
| Runoff Management System | 570 | Design Capacity | cfs | None | None | 50 | 100 | All | All | | | | |
| Subsurface Drain | 606 | Diameter System Length | in. 1000 ft. | 6 2.5 | 8 5 | 12 10 | 18 20 | AII AII | AII AII | | | | |
| Surface Drainage Field Ditch | 607 | Area of System | ac. | 40 | 80 | 160 | 320 | All | All | | | | |
| Surface Drainage Main and Lateral | 608 | Design Capacity Velocity | cfs fps | 50 4 | 100 5 | 200 6 | 300 8 | 1000 10 | 2000 12 | | | | |
| Terraces | 600 | Area Protected | ac. | 50 | 160 | All | All | All | All | | | | |
| Underground Outlet | 620 | Area Protected | ac. | 10 | 20 | 40 | 80 | All | All | | | | |
| Water & Sediment Control Basin | 638 | Storage Height | ac.in. ft. | 10 6 | 20 12 | 30 12 | 40 15 | AII AII | AII AII | | | | |

WATER SUPPLY

| PRACTICE | PRAC. | CONTROLLING | | | JO | B CLASSE | S | | | MAX APPROVAL AUTHORITY | | |
|-------------------------|-------|---|-------------|------------------------------|---------------------|----------|------|-----|------|---------------------------|-----|-----|
| NAME | CODE | FACTOR | UNITS | 1 | II | III | IV | v | VI | I&E | DSN | CST |
| Dry Hydrant | 432 | Pump Capacity | gpm | None | 300 | 750 | All | All | All | | | |
| | | Water Source | Kind | River or non- fluct. lake | Pond or fluct. lake | Stream | All | All | All | | | |
| Pipeline | 516 | Pressure | psi | 10 | 20 | 50 | 100 | 300 | All | | | |
| Pumping Plant | 533 | Axial Flow Pump Capaciity | 1000 gpm | 5 | 8 | 10 | 20 | 50 | 100 | | | |
| | | Centrifugal and Turbine Pump Capacity | 1000 gpm | None | 1 | 2 | 2.5 | 3.5 | 5 | | | |
| | | Centrified Pump Static Head | ft. | None | 100 | 200 | 250 | 350 | 500 | | | |
| | | Tubine Pump Static Head | ft. | None | 150 | 300 | 400 | 500 | 1000 | | | |
| Spring Development | 574 | Total Flow | gpm | 5 | 15 | 50 | 100 | All | All | | | |
| Water Well | 642 | Diameter | in. | 2 | 4 | 6 | 8 | All | All | | | |
| Watering Facility | 614 | Capacity | gal. | 250 | 500 | 1000 | 2000 | All | All | | | |
| Well Decommissioning | 351 | Type of Well | | Dug | All | All | All | All | All | | | |
| Decommissioning | | Depth | ft. | 25 | 100 | 200 | All | All | All | | | |
| | | Karst Topography | | no | no | no | no | yes | yes | | | |
| | | Flowing Artesian | | no | no | no | no | yes | yes | | | |

STREAM CHANNEL

| PRACTICE | PRAC. | CONTROLLING | | | | | MAX APPROVAL AUTHORITY | | | | | |
|---|-------|---------------------------------|------------|--------------|----------|----------|---------------------------|------------|------------|-----|-----|-----|
| NAME | CODE | FACTOR | UNITS | ı | II | III | IV | v | VI | I&E | DSN | CST |
| Clearing & Snagging | 326 | Length of Reach | 1000 ft. | 1 | 2 | 5 | 10 | All | All | | | |
| Dike | 356 | Hazard-Height | class-ft. | None | III-3 | III-6 | III-9 | III-AII | II-AII | | | |
| Land Clearing | 460 | Area Treated | ac. | 80 | 160 | 320 | All | All | All | | | |
| Open Channel | 582 | Design Capacity Velocity | cfs fps | None None | 150 4 | 300 6 | 500 8 | 1000 10 | 2000 12 | | | |
| Spoil Spreading | 572 | Length of Ditch | 1000 ft. | 2.5 | 5 | 10 | All | All | All | | | |
| Stream Channel Stabilization | 584 | Design Capacity Velocity | cfs fps | None None | 150 4 | 300 6 | 500 8 | 1000 10 | 2000 12 | | | |
| Stream Crossing | 578 | Bankfull Capacity | cfs | 50 | 100 | 200 | 500 | All | All | | | |
| Streambank and Shoreline Protection ^{4/} | 580 | Bankfull Capacity | 1000 cfs | 0.2 | 0.5 | 1.0 | 2.5 | 5 | 20 | | | |
| 1 Totolion | | Bankfull Velocity | fps | 2 | 4 | 6 | 8 | 10 | 12 | | | |
| | | Water Height Above Shoreline | ft. | None | None | 1 | 2 | 3 | 5 | | | |

IRRIGATION

| PRACTICE | PRAC. | CONTROLLING | | | | | MAX APPROVAL AUTHORITY | | | | | |
|--------------------------------|-------|--|------------|--------------|------------|--------------|---------------------------|--------------|------------|-----|-----|-----|
| NAME | CODE | FACTOR | UNITS | ı | II | III | IV | v | VI | I&E | DSN | сѕт |
| Field Ditch | 388 | Design Capacity | cfs | 5 | 10 | 25 | All | All | All | | | |
| Land Leveling | 464 | Area | ac. | None | 25 | 40 | 160 | All | All | | | |
| System, Sprinkler | 442 | Capacity | ac. | None | 40 | 160 | 320 | All | All | | | |
| System, Surface and Subsurface | 443 | Capacity | ac. | None | 40 | 160 | 320 | All | All | | | |
| System, Microirrigation | 441 | Capacity | ac. | None | 10 | 20 | 40 | All | All | | | |
| Water Conveyance Pipe | 430 | Pipeline Capacity 50 psi <50 psi | gpm gpm | None None | 500 750 | 1000 1500 | 2000 3000 | 3500 5000 | All All | | | |
| Water Management | 449 | Area Served | ac. | 160 | 320 | 640 | All | All | All | | | |

LAND RECLAMATION

| PRACTICE | PRAC. | CONTROLLING | | JOB CLASSES | | | | | | | MAX APPROVAL AUTHORITY | | |
|--|-------|----------------------------|-------|-------------|------|------|------|-----|------|-----|---------------------------|-----|--|
| NAME | CODE | FACTOR | UNITS | ı | II | III | IV | V | VI | I&E | DSN | CST | |
| Fire Control | 451 | Area | ac. | None | None | None | None | 1 | All | | | | |
| Highwall Treatment | 456 | Height With Seepage | ft. | 10 | 15 | 20 | 25 | 35 | 75 | | | | |
| | | Height Without Seepage | ft. | 10 | 15 | 25 | 35 | 50 | 100 | | | | |
| Land Smoothing | 466 | Area Treated | ac. | 5 | 20 | 40 | 80 | All | All | | | | |
| Land Reclamation, | 453 | Area | ac. | None | None | 0.25 | 0.5 | 1 | 5 | | | | |
| Landslide Treatment | | Depth | ft. | None | None | 5 | 8 | 10 | 20 | | | | |
| Land Reconstruction, Abandoned Mined Land | 543 | Slope | % | None | None | 15 | 30 | 50 | All | | | | |
| Obstruction Removal | 500 | No Hazard, Area Treated | ac. | 5 | 20 | 40 | 80 | All | All | | | | |
| Toxic Discharge Control | 455 | Flow | cfs | 5 | 10 | 25 | 50 | 100 | 1000 | | | | |

RECREATION 5/

| PRACTICE | PRAC. | CONTROLLING | | JOB CLASSES | | | | | | | MAX APPROVAL AUTHORITY | | |
|---|----------------------|--|---|-------------|----------|---------------|---------|-----|-----|-----|---------------------------|-----|--|
| NAME | CODE | FACTOR | UNITS | ı | II | III | IV | v | VI | I&E | DSN | сѕт | |
| Access Road | 560 | Culvert Pipe, I.D. | ft. | 2 | 3 | 4 | 5 | All | All | | | | |
| | | Monolithic Concrete Opening | sq.ft. | 3 | 8 | 15 | 20 | All | All | | | | |
| | | Bridge Span | ft. | 8 | 12 | 16 | 20 | All | All | | | | |
| | Surface Treatment | Туре | Earth | Gravel | Asphalt | Ashp- Con. | All | All | | | | | |
| | Length | 1000 ft. | 2 | 5 | 10 | 15 | All | All | | | | | |
| | | Grade (Max.) | % | 5 | 6 | 7 | 8 | All | All | | | | |
| Heavy Use Area Protection | 561 | Surface Treatment | Kind | Gravel | Concrete | Concrete | Asphalt | All | All | | | | |
| | | Area Treated | sq.yd. | 1250 | 2500 | 4000 | 6000 | All | All | | | | |
| Recreation Land Grading & Shaping | 566 | Area Graded | ac. | 4 | 6 | 8 | All | All | All | | | | |
| Recreaton Trail | 568 | Surface Trmt. | Kind | Earth | Gravel | Asphalt | All | All | All | | | | |
| and Walkway | | Length | 1000 ft. | 1 | 10 | 15 | 20 | All | All | | | | |
| Recreation Facilities | | Water Supply or Sewage Treatment | Daily Design Capacity (People) | | | | | | | | | | |
| | | Onsite Public | | None | None | 100 | 150 | 200 | 400 | | | | |
| | | Offsite Public | | None | None | 200 | 300 | 400 | 800 | | | | |

Reference NEM 520.22.

DEFINITIONS OF MAXIMUM APPROVAL AUTHORITY COLUMNS:

Inventory and Evaluation (I&E) - Outside observation of an exploratory nature and preparation of sound alternative solutions of sufficient intensity for the cooperator to make treatment decisions. May require assistance from higher levels.

Design (DSN) - Designing and checking all aspects of the supporting data, drawings, and specifications to insure that the planned practice will meet the purpose for which it is installed. Also includes setting any specific inspection requirements.

Construction (CST) - Construction approval for all aspects of job including inspection services, check-out surveys and construction documentation.

All Controlling Factors apply for these practice codes.

Animal Unit (A.U.) equals 1000 lbs. animal live weight.

Approval to be made by State Conservation Engineer on revetments, bulkheads, and groins for beaches and shorelines.

Recreation Facilities apply only to the master plan.